

Echelon 3000 Stapler

December, 2023

Device

Surgical stapling includes both manual and powered staplers, which may be used in open surgical or laparoscopic procedures. These staplers are used in multiple types of surgeries with various sizes and configurations to resect and fasten tissue in place. Surgical staplers are used to create a consistent staple shape to secure tissue.¹ The Ethicon Echelon 3000 stapler is used in a variety of specialties including: colorectal, thoracic, bariatric, urologic, and general surgery.² It is commonly used for low anterior resection, lobectomy, wedge resection, segmentectomy, sleeve gastrectomy, and gastric bypass surgeries. These staplers are available in sizes 45 mm and 60 mm with lengths of 28 cm, 34 cm, and 44 cm. The stapler offers powered stapler firing and articulation of greater than 110 degrees.²

Actions for Consideration

Partner: Identify colorectal, thoracic, bariatric, urologic, and general surgeons, perioperative nurses, surgical technologists, and first assistants, and the appropriate clinical and non-clinical value analysis team members to include in a review of these products. Discuss service line needs related to use and available features.

Connect: Identify products currently in use from all suppliers, to ensure all products are addressed. Understanding physician preferences and specialty needs will be helpful when reviewing data. Reviewing usage and cost by physician and procedure will help inform management of these products. Consider appropriate education and in-servicing for those team members identified, to allow for review and build familiarity with product. Supplier support will be crucial.

Communicate: When making a product change, ensure communication and discussion with all surgery specialties potentially affected to develop a common goal. Discuss product attributes, pricing, and potential to streamline products and develop strategies to manage use. Robust data sharing will not only enhance discussions, but may lead to actionable conversations between peers.

HealthTrust Resources: Access the [Clinical Knowledge Insights Library](#) to find other relevant documents and toolkits with actionable information. Examples for this product include resources on product conversion, value analysis, and conversion complexity matrix.³ Network on [HealthTrust Huddle](#), our member community that shares ideas and seeks guidance from colleagues.⁴

FDA Approval

The Ethicon Echelon 3000 stapler was approved by the FDA in 2022 (Found [here](#)).⁵ Indications for use include: "...transection, resection, and/or creation of anastomoses."⁶

Physician Advisor Insight

A panel of general surgeons, urologists, obstetrics/gynecologists, and bariatric surgeons within our HealthTrust Physician Advisor Network offered the following insight with regard to the Ethicon Echelon 3000 powered stapler⁵:

- There is an expressed comfortability with manual staplers, however powered staplers appear to be growing in interest and use.
- There is no noted superiority between staplers within this category.

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- Some advantages that powered staplers provide are: tip deflection, more regular deployment of staples in staple line, and stable progressive compression of tissue between the stapler jaws.
- Physicians note that a wider jaw aperture and automated toggle staple load are product advantages, along with a larger choice of articulation set positions.
- Consideration should be taken in relation to the larger size of a powered stapler and ergonomics related to hand size and dexterity.

Considerations

There are a number of staplers in the Endomechanical category ranging from manual to powered. According to category feedback from the Physician Advisors there is no notable superiority among products. In addition, there is no independent clinical evidence supporting one product over another. Given that this is a category with strong physician preference, engaging physicians in decision making and identifying and leveraging physician champions will help to maintain collaboration over time. Partnering with key stakeholders, sharing data, and educating the team about product and physician utilization, will help support product adoption.

References

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